

Catalogue of American Amphibians and Reptiles.

ERNST, CARL H. 1981. *Rhinoclemmys pulcherrima*.

***Rhinoclemmys pulcherrima* (Gray)**
Ornate terrapin

Emys pulcherrimus Gray, 1855:25. Type-locality, "Mexico," restricted to vicinity of San Marcos, Guerrero, Mexico (Ernst, 1978:125). Holotype, juvenile, British Mus. (Natur. Hist.) 1947.3.5.52, collector and date unknown (examined by author).

Emys incisa Bocourt, 1868:121. Type-locality, "montagne Conchavoua," La Union, El Salvador. Holotype, adult female, Mus. Nat. Hist. Natur., Paris 9131, collector and date unknown (examined by author).

Rhinoclemmys bocourti Gray, 1873a:111. Type-locality, "Central America." Holotype, not stated.

Rhinoclemmys frontalis Gray, 1873b:144. Type-locality, "tropical America." Holotype, adult female, British Mus. (Natur. Hist.) 1947.3.5.53, collector and date unknown (examined by author).

Rhinoclemmys pulcherrima: Gray, 1873b:145. First use of combination.

Geoemyda manni Dunn, 1930:33. Type-locality, "probably from San Jose, Costa Rica." Holotype, adult female, Mus. Comp. Zool., Harvard Univ. 29097, collected by E. R. Dunn in 1930 (examined by author).

Calopsis pulcherrima: Smith and Smith, 1975:5.

• **CONTENT.** Four subspecies are recognized: *Rhinoclemmys pulcherrima pulcherrima*, *R. p. incisa*, *R. p. manni*, and *R. p. rogerbarbouri*.

• **DEFINITION.** Adults grow to 206 mm in carapace length; females grow larger than males. The carapace is rough due to growth rings, mid-dorsally keeled, posteriorly serrated, notched posteriorly, and usually widest and highest just behind the middle. It is flatter and broader in the northern parts of the range and domed and narrower southward. The carapace is brown with unicolored pleurals to patterned ones with a single, dark bordered yellow or red spot to bright yellow or red lines or ocelli. The vertebrals may be unicolor, dark flecked, or with yellow or red radiations. The unhinged plastron is well developed and notched posteriorly; it is yellow with a narrow to wide central dark blotch. The seams may be dark bordered. The bridge is either completely brown or has a horizontal yellow bar separating the brown pigment from the carapace. The head is small, with a slightly projecting snout and notched and sometimes cusped upper jaw. The head bears a series of red stripes: 1) a median stripe runs forward between the orbits to the dorsal tip of the snout where it meets two other stripes, one from each orbit, to form a prefrontal arrow (these dorsolateral stripes may continue posteriorly through the orbit to the nape, and any of these stripes may be discontinuous); 2) a stripe runs posteriorly from below the nostrils along the upper jaw to the tympanum; 3) a stripe runs from each nostril to the corresponding orbit; 4) several stripes (usually two or three) run from the orbit to the tympanum. The jaws and chin are yellow and the lower jaw and chin may contain red stripes, large black spots, or ocelli. The feet are only slightly webbed, if at all. The forelegs are covered with large red or yellow scales with rows of black spots. The remainder of the skin is olive to yellow or rufous. Males have concave plastrons and longer tails with the vent beyond the carapacial margin; females are larger, with flat plastra slightly upturned anteriorly and shorter tails with the vent beneath the carapace.

• **DESCRIPTIONS.** The best general descriptions of adults are given by Boulenger (1889), Wettstein (1934), Mertens (1952), Wermuth and Mertens (1961), Pritchard (1967) and Ernst (1978). Hatchlings are described by Christensen (1975). Anatomical descriptions include: arterial canals (McDowell, 1961), cervical vertebrae (Williams, 1950), choanal structure (Parsons, 1960, 1968), rostral pores and mental glands (Winokur and Legler, 1974, 1975).

• **ILLUSTRATIONS.** Color photographs are in Pritchard (1967) and Janzen (1980), black and white illustrations in Guenther (1885), Wermuth and Mertens (1961), and Ernst (1978). An x-ray photograph of a gravid female and photographs of eggs and hatch-

lings have been published in Chelonia (1976), 2(4). Anatomical illustrations include: pancreas (Miller and Lagios, 1970) and choanal structure (Parsons, 1968).

• **DISTRIBUTION.** *Rhinoclemmys pulcherrima* is restricted to the west coast of Mexico and Central America where it extends from Sonora, Mexico to Costa Rica. Four subspecies occur within the range: *Rhinoclemmys p. rogerbarbouri*, from southern Sonora to Colima, including a questionable record from southcentral Chiuhuahua (USNM 104626); *R. p. pulcherrima*, Guerrero; *R. p. incisa*, from Oaxaca, Mexico southward to northern Nicaragua; *R. p. manni*, southern Nicaragua and northern Costa Rica.

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** The only general account is Mertens (1952). Other important references are listed by topic. Taxonomy: McDowell (1964), Ernst (1978). Reproduction: Christensen (1975), Ewert (1979). Visual cliff behavior: Ashe et al. (1975). Parasites: Fairchild et al. (1966), Ernst and Ernst (1977). Pancreas: Grassé (1970), Miller and Lagios (1970). Hemoglobin properties: Sullivan and Riggs (1967). Karyotype: Bickham and Baker (1976).

• **ETYMOLOGY.** The name *pulcherrima* derives from the Latin *pulcher* for beautiful and refers to the shell and head markings. Subspecific names are derived as follows: *incisa* from the Latin *incido* meaning to cut into and probably refers to the sharp prefrontal, arrow-like head stripe; *manni* for Dr. William Mann, late director U.S. National Zoological Park and *rogerbarbouri* for Dr. Roger W. Barbour, vertebrate zoologist of University of Kentucky.

1. *Rhinoclemmys pulcherrima pulcherrima* (Gray)

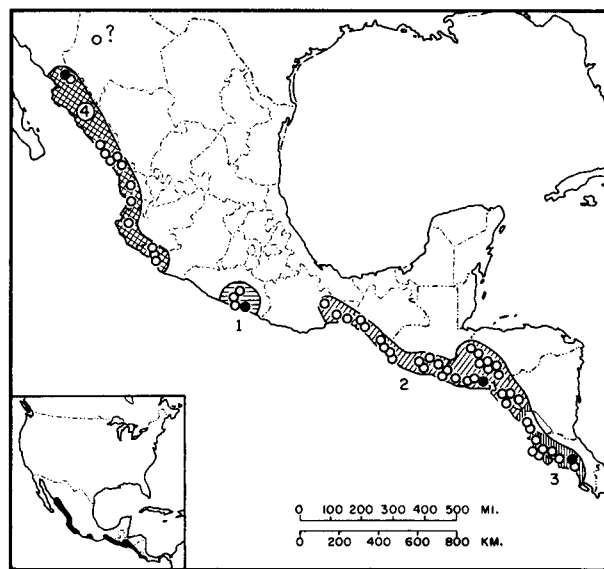
Emys pulcherrima Gray, 1855:25. See species synonymy.

Nicoria punctularia var. *pulcherrima*: Boulenger, 1889:125.

Geoemyda pulcherrima pulcherrima: Wettstein, 1934:18.

Rhinoclemmys pulcherrima pulcherrima: Smith and Taylor, 1966:12. First use of combination.

• **DEFINITION.** A low, wide, brown carapace bears dark flecks, a single dark bordered, red or yellow central spot on each pleural, and two or three light bars on the undersides of the marginals. The narrow, dark central plastral blotch may be forked on the gulars and anals, and the bridge pattern consists of a yellow and a black transverse bar.



MAP. The solid circles mark the type-localities; open circles indicate other selected localities.

2. *Rhinoclemmys pulcherrima incisa* (Bocourt)

Emys incisa Bocourt, 1868:121. See species synonymy.
Rhinoclemmys bocourti Gray, 1873a:111. See species synonymy.
Rhinoclemmys frontalis Gray, 1873b:144. See species synonymy.
Nicoria punctularia var. *incisa*: Boulenger, 1889:125.
Rhinoclemmys pulcherrima incisa: Smith and Taylor, 1966:12.
 First use of combination.

• DEFINITION. A medium to high domed, brown carapace bears dark flecks, a dark bordered red or yellow stripe or large ocellus on each pleural, and a light bar on the underside of each marginal. The narrow, dark, central plastral blotch is unforked on the gulars and anals, and the bridge is brown.

3. *Rhinoclemmys pulcherrima manni* (Dunn)

Geoemyda manni Dunn, 1930:33. See species synonymy.
Geoemyda pulcherrima manni: Wettstein, 1934:15.

• DEFINITION. The high domed, brown carapace has several large red or yellow ocelli on each pleural and two light bars on the undersides of each marginal. The narrow, dark, central plastral blotch may fork on the gulars and anals, and the bridge pattern is a yellow and a black transverse bar.

4. *Rhinoclemmys pulcherrima rogerbarboursi* (Ernst)

Calopsis pulcherrima rogerbarboursi Ernst, 1978:127. Type-locality, "Guiracoba, Sonora, Mexico." Holotype, adult female, Amer. Mus. Natur. Hist. 63760, collected by John W. Hilton between 15 June and 15 October, 1941 (examined by author).

• DEFINITION. The low, wide brown carapace has no pleural markings or occasionally only a faint reddish stripe. The undersides of each marginal bears a single light bar. The plastron has a wide, often faded, dark central blotch, and a brown bridge.

COMMENT

Smith and Taylor (1950:30) restricted the type-locality of *Emys pulcherrima* Gray to Presidio de Mazatlán, Sinaloa, Mexico. Ernst (1978:127) later found the holotype identical to the population from Guerrero, Mexico, and corrected the type-locality.

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